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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,009	07/11/2003	Barry Andersen	0697500/2001	4388

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EXAMINER

SHRIVER II, JAMES A

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,009

Applicant(s)

ANDERSEN, BARRY

Examiner

J. Allen Shriver

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/11/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because in Figure 5, Reference number "222" is shown representing the upper side and reference number "224" is shown representing the lower side, which is incorrect. These numbers have been reversed and numbers in Figure 5 should be switched. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-6, 8-14 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (US Patent 5,273,318).** Nakayama et al. discloses a mud flap (See Fig. 7) that is adapted to be attached to a vehicle behind or outside a wheel thereof, said mud flap comprising: an integrally-formed, mesh panel (1), said panel comprising a front face, a top edge, a plurality of strands (See Fig. 7), a plurality of openings (7) defined by said plurality of strands; wherein the openings in the integrally-formed, mesh panel are adapted to permit air to flow there through, and wherein the openings in the integrally-formed, mesh panel are sized such

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that substantially all water and roadway debris encountered by the panel is deflected by the panel, and a means for attaching the panel to the vehicle (this is inherent for the proper operation of the mud flap); [claim 2] wherein the deflecting panel is made from a polymeric material (See column 4, lines 4-9); [claim 5] wherein the plurality of strands comprise a plurality of substantially parallel, horizontally-disposed strands (6); [claim 6] wherein the plurality of strands comprise a plurality of substantially parallel, vertically-disposed strands (8); [claim 12] wherein the mud flap includes a plurality of vertical support members (3) adapted to provide support to the panel; [claim 18] wherein the means for attaching the mud flap to a vehicle is located near the top edge of the integrally-formed, mesh panel (inherent).

Nakayama et al. does not specifically disclose wherein the sum of the areas of the openings represents at least 75%-85% of the total surface area of the front face of the panel. The specification states that the first embodiment for Nakayama et al. is required to be approximately 50 percent open relative to the total surface area thereof, however another embodiment is shown in Figure 7 which shows a percent for the openings greater than 50 percent. Although Nakayama et al. does not specifically state the percent ranges for the openings in relation to the total surface area of the panel, it would have been an obvious matter of design choice to have the openings represent at least 75%-85% of the total surface area of the panel, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 3-4, Nakayama et al. does not specifically disclose wherein the integrally-formed, mesh panel has a thickness of less than $\frac{1}{4}$ inch and $\frac{1}{8}$ inch. Although

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Nakayama et al. does not specifically state the dimensions mesh panel, it would have been an obvious matter of design choice to have the thickness of the panel less than $\frac{1}{4}$ and $\frac{1}{8}$ inch, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). The thickness of the panel would typically be in the range of $\frac{1}{8}$ to $\frac{1}{4}$ inch, so that the panel would be flexible, but still possess enough rigidity in the wind.

Regarding claims 9-10, Nakayama et al. does not specifically disclose wherein the plurality of openings are sized such that there are between 8 and 16 openings per linear inch of the panel (and between 64 and 256 openings per square inch of panel). Although Nakayama et al. does not specifically state the dimensions of the openings per inch of the panel, it would have been an obvious matter of design choice to have the openings sized to fall with the range of 8 to 16 openings per linear inch of the panel. The motivation being to have enough openings to allow the wind and water to travel through the openings of the panel, but not allowing road debris and rocks from getting through the openings.

Regarding claim 11, Nakayama et al. does not specifically disclose wherein each opening in the integrally-formed, mesh panel has a minimum dimension of no more than $\frac{1}{8}$ inch. However, it would have been obvious to a person of ordinary skill in this art to make the opening no more than about $\frac{1}{8}$ inch; the motivation being to allow wind and water to travel through the opening, while not allowing rocks and debris from traveling through the opening.

Regarding claims 13-14, Nakayama et al. does not specifically disclose wherein the plurality of vertical support members are spaced apart at least 5 and 10 inches from each other. Although Nakayama et al. does not specifically state the dimensions between the vertical support

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members, it would have been an obvious matter of design choice to have the vertical support members spaced apart either 5 or 10 inches apart, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). The distance between the vertical support members would be dependent upon the overall dimensions of the vehicle's mud flap.

Regarding claims 19-20, under the principles of inherency, if a prior art device, its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). In this instance, Applicant is merely claiming the method of providing the apparatus set forth in claim 1 for deflecting water and roadway debris.

4. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (US Patent 5,273,318) in view of Fischer (US Patent 5,366,247). Nakayama et al. discloses a mud flap as set forth above, but does not disclose wherein the mud flap includes a plurality of horizontal support members adapted to provide support to the panel. Fischer discloses a mud flap (10) includes a plurality of horizontal support members (14,16) adapted to provide support to the panel. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to provide a plurality of horizontal support members on the panel disclosed in Nakayama et al. in view of the teaching of Fischer. The motivation for

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providing horizontal support members would be to provide structural rigidity for the panel to prevent twisting of the panel.

Regarding claims 16-17, neither Nakayama et al. nor Fischer specifically disclose wherein the horizontal support members are spaced apart at least 5 (and 10) inches from each other. Although Nakayama et al. and Fischer do not specifically state the dimensions between the horizontal support members, it would have been an obvious matter of design choice to have the horizontal support members spaced apart either 5 or 10 inches apart, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). The distance between the horizontal support members would be dependent upon the overall dimensions of the vehicle's mud flap.

5. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (US Patent 5,273,318) in view of Hermanson et al. (US Patent 5,145,617).** Nakayama et al. discloses a mud flap as set forth above, but does not disclose wherein the plurality of strands are interwoven. Hermanson et al. discloses a process of making mud flaps (See column 2, lines 38-43) wherein the plurality of strands (7,8,9) are interwoven (See Fig. 8 and column 4, lines 33+). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to interweave the strands together in Nakayama et al. in view of the teaching of Hermanson et al. The motivation for doing so would have been to give the panel greater strength by interweaving the strands together to prevent tearing of the mud flap panel.

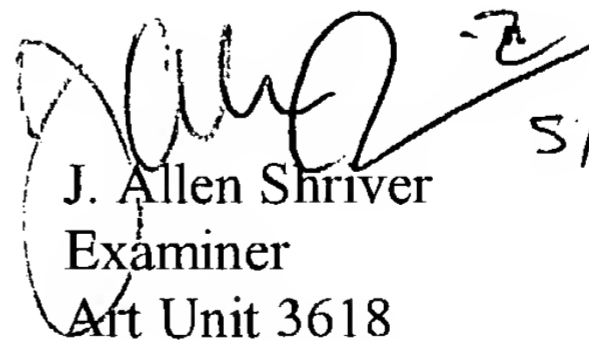
Conclusion

6. The prior art made of record in the accompanying PTO Form 892 and not relied upon is considered pertinent to applicant's disclosure. Bajorek et al. (US Patent 5,564,750), Curbishley (GB 2,144,690 A), Morin et al. (US Patent Application Publication 2003/0141713 A1), Loddo (US Patent Application Publication 2004/0080185 A1) and Carlton (US Patent 3,582,108) are relied on to show a mud flap panel having openings to allow the flow of water and wind.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Allen Shriver whose telephone number is (703) 308-1224. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Johnson can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


J. Allen Shriver
Examiner
Art Unit 3618
5/15/04

JAS